

Consolidation Coal Company P.O. Box 566 Sesser, IL 62884 (618) 625-2041

October 17, 2006

Pamela Grubaugh-Littig
Utah Division of Oil, Gas and Mining
Coal Program
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re:

Hidden Valley Mine

Notice of Intent to Conduct Minor Exploration

Additional Information UPDES data

Dear Mrs. Grubaugh-Littig:

Please consider this additional information, per Steve Christensen of your staff, pertaining to the above mentioned submittal. The additional data can be inserted as page ii (Table of Contents), page 3 (text) and appendix E in the approved Notice of Intent to Conduct Minor Exploration. The UPDES modification was needed to allow for discharge of water encountered during the drilling process. We are submitting three copies of the additional information. A fourth copy has been forwarded to your Price field office.

If you have any questions concerning this information, please call me at (618) 625-6850.

Sincerely,

John Gefferth

**Environmental Engineer** 

CC: Steve Demczak – DOGM-Price Field Office-with attachments Attachments

RECEIVED OCT 1 9 2006

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Appendix A – Vegetation Survey

Appendix B – Cultural Resource Inventory (in Confidential File)

Appendix C – Wildlife Information

Appendix D – Results of May 2006 Raptor Survey

Appendix E – Exploration Program Discharge Information

#### LIST OF PLATES

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Plate 1 – Proposed Hidden Valley Drill Holes

TABLE 1
Summary of Estimated Drill Hole Locations and Depths<sup>(a)</sup>

Drill Hole			Approx.	Estimated
Number	Northing	Easting	Elev. (ft)	Depth (ft)
HV-06- 01	2,058,903	175,945	6006	447
HV-06- 02	2,057,873	173,806	6063	492
HV-06- 03	2,060,829	177,587	6041	430
HV-06- 04	2,060,671	175,548	6048	411
HV-06- 05	2,062,095	173,298	6164	437
HV-06- 06	2,062,970	177,141	6119	379
HV-06- 07	2,063,089	175,356	6199	437
HV-06- 08	2,064,482	177,570	6080	254
HV-06- 09	2,065,102	176,411	6198	340

(a) Total estimated depths include 30 feet of drilling beneath target seam floor.

# Period of Intended Exploration:

Planned startup date:

August 15, 2006

Planned completion date:

December 15, 2006

It is anticipated that all drilling and reclamation activities associated with this project will be completed within 90 days following the date of implementation. However, given the high demand for drilling services the actual startup date may be pushed back from the intended start in August, thereby delaying the completion date. All holes will be sealed and the associated disturbed areas reclaimed within two weeks of completion.

#### Method of Exploration:

<u>Drilling Methods:</u> The method of exploration to be used is rotary/core drilling. Support equipment will include a water truck, flatbed truck to haul pipe and materials, a down-hole geophysical logging truck, pickup trucks to transport personnel, and equipment to reclaim the drill sites once drilling is complete.

It is anticipated that each hole will be rotary drilled to within approximately 20 feet of the top of the "A" coal seam, at which time the rest of the hole will be cored to a depth approximately 5 feet below the "A" seam. Drilling will be accomplished using a contractor experienced in rotary and core drilling. The drilling shall be accomplished without the aid of drilling fluids if possible. If drilling fluids are required, a portable mud pit will be used. No excavated mud pits are planned. Subsurface water will be discharged at the surface in accordance with the requirements of the Utah Division of Water Quality (see Appendix E).

# APPENDIX E

**Exploration Program Discharge Information** 



State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D. Executive Director

DIVISION OF WATER QUALITY Walter L. Baker, P.E. Director JON M. HUNTSMAN JR.

Governor

GARY HERBERT
Lieutenant Governor

October 13, 2006

CERTIFIED MAIL (Return Receipt requested)

Jonathan M. Pachter, Vice President Consolidation Coal Company P.O. Box 566 Sesser, IL 62884

7205 IPOD 5000 D250 400

Dear Mr. Pachter:

Subject: 1

Modified UPDES General Permit No. UTG040026 for the

Consolidation Coal - Hidden Valley Mine Site in Emery, Utah.

Enclosed is a signed copy of the Modified Utah Pollutant Discharge Elimination System (UPDES) General Permit No. UTG040000 for the above referenced facility. Coverage under this general permit for your facility is referred to as application number UTG040026. The conditions and requirements of this modified permit are effective as of October 13, 2006, subject to the right to challenge this decision in accordance with the provisions of *Utah Administrative Code R317-9*. As a reminder, Discharge Monitoring Reports (DMR) forms, EPA form 3320-1, for reporting and self-monitoring requirements as specified in the permit, are due in our office by the 28<sup>th</sup> of each month.

A fee schedule was included in the Utah Department of Environmental Quality Budget appropriation request at the direction of the Legislature and in accordance with Utah Code Annotated 19-1-201. The fee schedule, as approved by the legislature, includes a prescribed fee for specific Industrial Categories. The prescribed fee for UPDES Permit Modification category is \$70.00 per hour. A total of six hours were used to develop and implement the permit modification. Therefore please remit \$420.00 (6 hours @ \$70.00 per hour) within 30 days from receipt of this letter to:

Department of Environmental Quality
Division of Water Quality
Attn: Stacy Carroll
P.O. Box 144870
Salt Lake City, UT 84114-4870

Page 2

Please be sure to include the invoice number with you remittance.

Also, as the State agency charged with the administration of issuing UPDES permits, we are continuously looking for ways to improve our quality of service to you. In an effort to improve the State UPDES permitting process, we are asking for your input. Since our customer permittee base is limited, your input is important to us. Please take a few moments to complete the enclosed questionnaire and return it in the postage paid, self-addressed return envelope. The results will be used to improve our quality and responsiveness to our permittees and give us feed back on customer satisfaction. We will address any issues you identify on an ongoing basis.

If you have any questions with regards to this matter, please contact Jeff Studenka of this office at (801) 538-6779 or by e-mail at jstudenka@utah.gov.

Sincerely,

Mike Herkimer, Manager **UPDES** Permits Section

Enclosures

cc (w/ Encl.): Qian Zhang, P.E., EPA Region VIII Claron Bjork, SE Utah District Health Dave Ariotti, SE District Engineer

Pam Grubaugh-Littig, Utah Division of Oil Gas & Mining Jim Karpowitz, Utah Division of Wildlife Resources Nathan Darnall, U.S. Fish & Wildlife Services

F:\wp\GP-Coal Mines\Consol-Hidden Valley Mine\2006ModPermitCov.ltr.doc

# FILE COPY

FAX NO. 8015386016

Permit No. UTG040000 **Minor Industrial** 

STATE OF UTAH DIVISION OF WATER QUALITY DEPARTMENT OF ENVIRONMENTAL QUALITY SALT LAKE CITY, UTAH

## AUTHORIZATION TO DISCHARGE UNDER THE

# UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)

# GENERAL PERMIT FOR COAL MINING

In compliance with provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended (the "Act"),

# Consolidation Coal Company - Hidden Valley Mine Site

as identified in the application No. UTG040026 is authorized to discharge from all outfalls to receiving waters named:

# Ivie Creek and unnamed drainages to Ivie Creek (tributary to the Colorado River)

in accordance with discharge points, effluent limitations, monitoring requirements and other conditions as set forth herein.

This Modified permit shall become effective on October 13, 2006.

This permit and the authorization to discharge shall expire at midnight, April 30, 2008

Signed this 13th day of October 2006

Walter L. Baker, P.E. Executive Secretary

Utah Water Quality Board

www.jbrenv.com

8160 South Highland Drive • Sandy, Utah 84093 [P] 801.943.4144 [F] 801.942.1852

October 6, 2006

Mr. Jeff Studenka, Environmental Scientist Utah Division of Water Quality P.O. Box 144870 Salt Lake City, Utah 84114-4870

RE: Consolidation Coal Company UPDES Permit No. UTG040026 Request for Additional Temporary Discharges

Dear Jeff,

Consolidation Coal Company (Consol) recently began a coal exploration drilling program at the Hidden Valley Mine, as allowed and approved by the Utah Division of Oil, Gas, and Mining (DOGM). Consol's geologists did not anticipate intercepting significant quantities of groundwater in these holes. Thus, discharging water during the exploration activities was not anticipated, and Utah Division of Water Quality (DWQ) was not consulted prior the project. However, significant quantities of groundwater were unexpectedly encountered while drilling the first hole.

We understand from telephone conversations with you that discharging this intercepted groundwater to waters of the State does not come under DWQ's exception for water well drilling operations. We further understand that this means the discharge must be permitted by DWQ's Utah Pollutant Discharge Elimination System (UPDES) program. This letter provides information on the nature of the discharge, and requests approval under two different permit avenues. Consol hopes to expedite these approvals because drilling delays are very costly; if the drillers need to demobilize due to water issues, their schedules may not allow them to return for several months. We appreciate your willingness to work with us on this unanticipated permitting effort.

As you know, Consol recently obtained General UPDES Permit (No. UTG040026) coverage for storm water discharges from the Hidden Valley Mine. The receiving water for these discharges is Ivie Creek. Consol also has an Individual UPDES Permit (No. UT0022616) for both storm water and intercepted groundwater discharges from the Emery Mine, located several miles north of the Hidden Valley project. The receiving

Mr. Jeff Studenka October 6, 2006 Page 2

water for these discharges is Quitchupah Creek, which is tributary to Ivie Creek. While we understand that it is acceptable to haul intercepted groundwater from the boreholes to the Emery Mine and discharge it to one of three sediment ponds that are permitted to receive intercepted groundwater from the Emery Mine, the logistics and cost of this solution indicate that it is not practical for anything other than a stopgap measure. Because this solution is not practical other than as an immediate, very temporary solution, we would also like to add additional outfall locations to our Hidden Valley UPDES Permit. The purpose of these additional outfalls would be to allow us to discharge the intercepted groundwater at the borehole sites to small unnamed washes that have the potential to flow to Ivie Creek. Both of these options are described more thoroughly below.

### Nature of Discharge

Groundwater was encountered in borehole HV-06-01 (See attached figure) during drilling in the Ferron Sandstone Member of the Mancos Shale Formation. The Ferron Sandstone underlies the Blue Gate Shale, which is exposed at the ground surface in the project area. It consists of various discontinuous lithologic units, including the coal seam that is the focus of the exploration drilling program. Groundwater was encountered in a sandy bed of the Ferron Sandstone, an unknown distance above the coal seam. There is the likelihood that the remaining 8 boreholes will similarly intercept groundwater associated with this geologic unit. The Emery Mine also intercepts groundwater from the Ferron Sandstone during mining, and discharges it to Quitchupah Creek.

As described in hydrologic reports prepared for DOGM permitting efforts at both the old Hidden Valley Mine and the Emery Mine, published literature indicates that natural discharge from the Ferron Sandstone supplies baseflow to area streams, including Quitchupah and Ivie Creeks. Consol has sampled Ivie Creek as it flows through the Hidden Valley property for a number of years; an example of a recent baseflow sample analysis is provided below.

Ivie Creek Baseflow Data – September 2005

Parameter	Reported Value
TSS (mg/l)	51
Settleable Solids (mg/l)	<0.1
Total Iron (mg/l)	1.04
pH (std.units)	8.2
TDS (mg/l)	2,723

Mr. Jeff Studenka October 6, 2006 Page 3

A sample of the intercepted groundwater from HV-06-01 was collected on October 5, 2006 after it had been run through the clarifiers and undergone 12 hours of settling. The complete results of the lab analysis are attached. The standard General UPDES Permit parameters are provided below. As shown, this water quality similar to -- or better than -- the lvie Creek baseflow data provided above. In addition, the complete analysis does not indicate any other parameters of concern.

Treated Groundwater From HV-06-01

Trouba Groundwater From TV-00-01				
Parameter	Reported Value			
TSS (mg/l)	15			
Settleable Solids (mg/l)	<0.1			
Total Iron (mg/l)	0.43			
pH (std.units)	8.35			
TDS (mg/l)	1,802			
Oil and Grease	<2			

#### **Discharge Logistics**

Groundwater intercepted from HV-06-01 is currently being discharged to two in-series tanks placed at the borehole site, where clarifying and settling occurs. Should tank capacity be reached prior to a permit amendment that would allow on-site release of this water under the Hidden Valley General UPDES Permit, Consol would either transfer this treated water to a tanker truck, and haul it to the Emery Mine, or cease drilling operations until permission is received to discharge directly to the adjacent surface. If hauled to one of the existing sedimentation ponds, it would be released to ponds associated with Outfalls 001, 003, or 004, which are currently permitted to receive intercepted Ferron Sandstone groundwater under the Emery Mine Individual UPDES Permit. Should the additional groundwater cause any pond to discharge, samples would be taken as specified by the existing UPDES permit, and all other applicable permit terms and conditions would be met, including compliance with effluent limitations.

Because of the multiple number of transfers required to haul the intercepted groundwater to the Emery Mine, and because of access difficulties for tanker trucks, this is considered as an undesirable and, at best, an interim solution only. As a result, once the Hidden Valley General UPDES Permit is amended to allow additional outfalls where intercepted groundwater can be discharged, water would not be hauled to the Emery Mine. Instead, after appropriate treatment, groundwater would be discharged from the settling tank, and released to the ground surface. This would occur in a non-erosive fashion, with appropriate BMPs such as silt fences or hay bales used as necessary to prevent excessive scour at and near the release point. For most of the boreholes, it is unlikely that the released water would reach lvie Creek; existing ephemeral watercourses are very small and topographically distant from the creek.

Mr. Jeff Studenka October 6, 2006 Page 4

As shown on the attached figure, a maximum of nine boreholes are planned. It is unlikely that HV-06-09 will be drilled, though it is included here for completeness. Latitude/longitude for these boreholes are given in the following table.

#### **Borehole Locations**

Borehole ID	Latitude	Longitude
HV-06-01	38° 48' 59"	111° 17′ 38″
HV-06-02	38° 48' 37"	111° 17' 52"
HV-06-03	38° 49' 14"	111° 17' 14"
HV-06-04	38° 48' 54"	111° 17' 16"
HV-06-05	38° 48' 32"	111° 16′ 58″
HV-06-06	38° 49' 07"	111° 16′ 45″
HV-06-07	38° 48' 47"	111° 16′ 53″
HV-06-08	38° 49' 12"	111° 16′ 33″
HV-06-09	38° 49' 05"	111° 16' 20"

We hope that this information is sufficient for DWQ's needs, and that it will enable you to approve Consol's requested discharges. If you would like to discuss any of this, or if you need any additional information, please feel free to contact me.

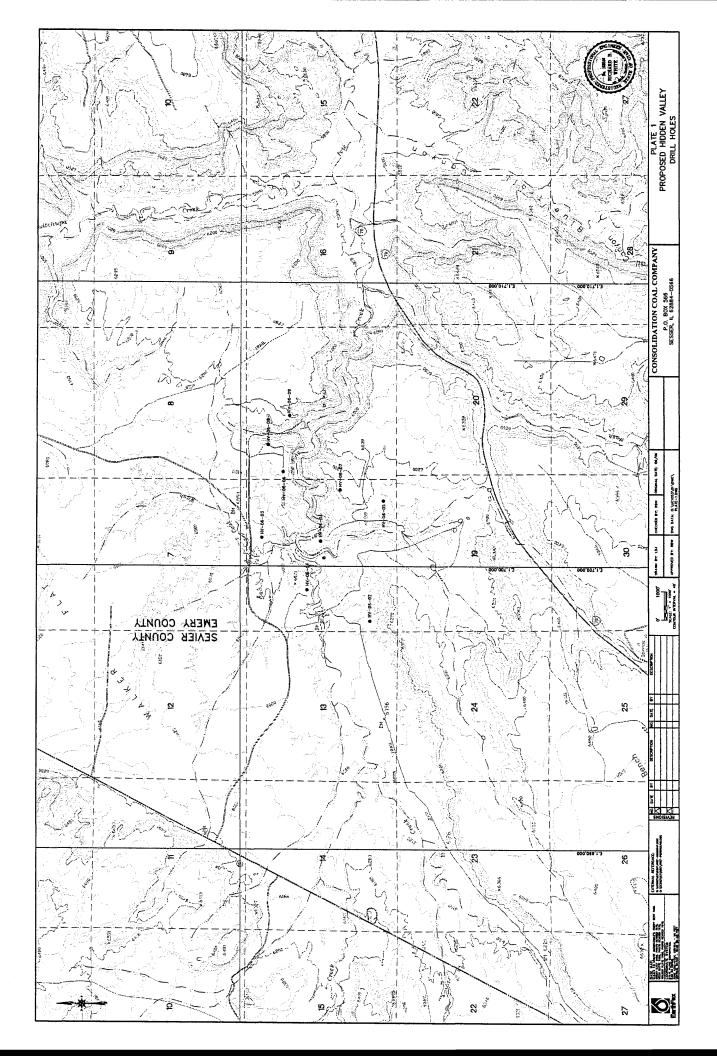
Sincerely,

Karla Knoop, hydrologist

attachments

Copy: John Gefferth, Consol

Richard White, Earthfax Engineering





October 6, 2006

EARTHFAX ENGINEERING 7324 SO. UNION PARK AVENUE SUITE 100 MIDVALE, UTAH 84047 Richard B. White

Kind of sample Water

reported to us

Sample taken at Consol

Sample taken by EarthFax Eng.

Date sampled October 5, 2006

Date received October 5, 2006

Sample identification by EarthFax Enginerring

ID:BT-1

RECEIVED 1210 SAMPLED 0930

NOTES:

Page 1 of 2

Analysis report no. 59-29337

	•		-			Analyzed	
Parameter	Result	MRL	Units		Method	Date/Time/Anal	yst
Alkalinity, Bicarbonate	249	5	mg/l as	CaCO <sub>3</sub>	SM 2320 B	10-05-2006 1649	CA
Alkalinity, Carbonate	13	5		CaCO3	SM 2320 B	10-05-2006 1649	CA
Alkalinity, Total	263	5	mg/l as	CaCO <sub>3</sub>	SM 2320.1	10-05-2006 1649	CA
Aluminum, Total	0.68	0.030	mg/l	_	EPA 200.7	10-05-2006 1816	DI
Anions	27.3		meq/1			10-06-2006 1015	SJ
Arsenic, Total	<0.010	0.010	mg/l		EPA 200.7	10-05-2006 1816	DI
Barium, Total	0.159	0.002	mg/l		EPA 200.7	10-05-2006 1816	DI
Boron, Total	0.43	0.010	mg/l		EPA 200.7	10-05-2006 1816	DI
Cadmium, Total	<0.001	0.001	mg/l		EPA 200.7	10-05-2006 1816	DI
Calcium, Total	49.87	0.03	mg/l		EPA 200.7	10-05-2006 1816	DI
Cations	28.2		meq/l			10-06-2006 1015	SJ
Chloride	107	1	mg/l		EPA 300.0	10-05-2006 1902	BM
Chromium, Total	<0.001	0.001	mg/l		EPA 200.7	10-05-2006 1816	DI
Copper, Total	<0.01	0.010	mg/l		EPA 200.7	10-05-2006 1816	DI
Hardness, Total	266		mg/l as	$CaCO_3$	SM2340-B	10-06-2006 1015	SJ
Iron, Total	0.43	0.050	mg/l		EPA 200.7	10-05-2006 1816	DI
Lead, Total	<0.01	0.010	mg/l		EPA 200.7	10-05-2006 1816	DI
Magnesium, Total	34.40	0.01	mg/1		EPA 200.7	10-05-2006 1816	DI
Molybdenum, Total	0.020	0.005	mg/1		EPA 200.7	10-05-2006 1816	DI
Nickel, Total	<0.001	0.001	mg/l		EPA 200.7	10-05-2006 1816	DI
Nitrogen, Nitrate	<0.05	0.05	mg/las	N	EPA 300.0	10-05-2006 1902	BM
Nitrogen, Nitrite	<0.05	0.05	mg/l as	N	EPA 300.0	10-05-2006 1902	BM
Oil & Grease	<2	2	mg/l		EPA 413.1	10-05-2006 1300	CA
рн	8.35		pH units		EPA 150.1	10-05-2006 1349	GF

Respectfully submitted, SGS NORTH AMERICA INC.

SGS North America Inc. | Minerals Services Division

P.O. Box 1020, Huntington, UT 84528 t (435) 653-2311 f (435) 653-2436 www.us.sgs.com/minerals



October 6, 2006

EARTHFAX ENGINEERING 7324 SO. UNION PARK AVENUE SUITE 100 MIDVALE, UTAH 84047 Richard B. White

Kind of sample Water

reported to us

Sample taken at Consol

Sample taken by EarthFax Eng.

Date sampled October 5, 2006

Date received October 5, 2006

Sample identification by EarthFax Enginerring

ID:BT-1

RECEIVED 1210 SAMPLED 0930

NOTES:

Page 2 of 2

Analysis report no. 59-29337

	•				Analyzed		
Parameter	Result	MRL	Units	Method	Date/Time/Anal	yst	
pH Sample Temp.	16.0		Deg C	EPA 150.1	10-05-2006 1349	GF	
Potassium, Total	11.65	0.14	mg/l	EPA 200.7	10-05-2006 1816	DI	
Selenium, Total	<0.02	0.020	mg/l	EPA 200.7	10-05-2006 1816	DI	
Silver, Total	<0.002	0.002	mg/l	EPA 200.7	10-05-2006 1816	DI	
Sodium, Total	520.30	0.09	mg/l	EPA 200.7	10-05-2006 1816	DI	
Solids, Settleable	<0.1	0.1	ml/l	EPA 160.5	10-05-2006 1430	CA	
Solids, Total Dissolved	1802	30	mg/l	EPA 160.1	10-05-2006 1340	BM	
Solids, Total Suspended	15	5	mg/l	EPA 160.2	10-05-2006 1340	BM	
Sulfate	914	1	mg/l	EPA 300.0	10-05-2006 1902	BM	
Zinc, Total	0.005	0.004	mg/l	EPA 200.7	10-05-2006 1816	DI	
Cation/Anion Balance	1.7		8		10-06-2006 1015	SJ	

Respectfully submitted, SGS NORTH AMERICA INC.

SGS North America Inc. | Minerals Services Division

P.O. Box 1020, Huntington, UT 84528 t (435) 653-2311 1+(435) 653-2436 www.us.sgs.com/minerals

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